

# (12) UK Patent Application (19) GB (11) 2 106 858 A

(21) Application No 8218840

(22) Date of filing  
30 Jun 1982

(30) Priority data

(31) 8120074

(32) 30 Jun 1981

(33) United Kingdom (GB)

(43) Application published  
20 Apr 1983

(51) INT CL<sup>3</sup> B63B 23/02

(52) Domestic classification  
B8H S81A S81B  
U1S 1834 1871 2317  
B8H

(56) Documents cited  
GB A 2054517  
GB 2081211

(58) Field of search  
B8H

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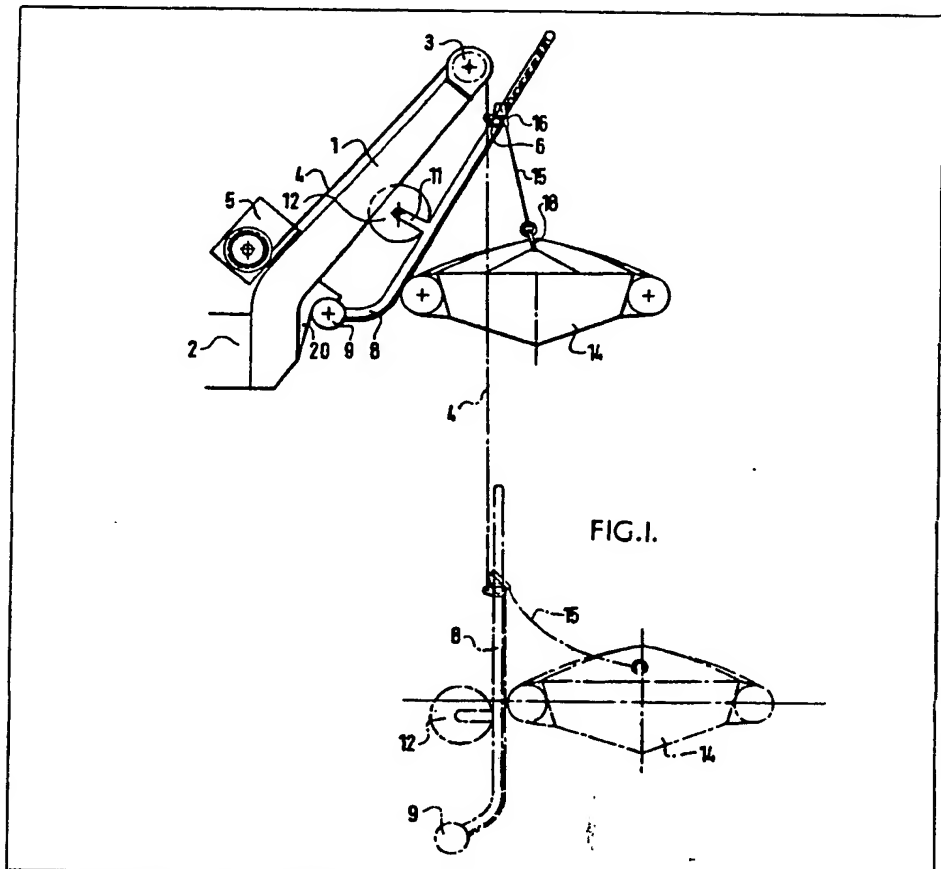
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## (54) Boat launching system

(57) A boat launching system launching small vessels from marine structures such as ships, rigs or platforms, comprises a davit system comprising derrick means (1) mounted on the marine structure (2) and having two or more horizontally spaced sheaves (3); a boat support cradle comprising a generally horizontal member and two or more spaced boat support member (8) extending downwardly therefrom; two or more fall wires (4) passing over the sheaves (3) and connected to the upper part of the cradle; and a latching member (16) mounted on the cradle at a point horizontally spaced intermediate the points of attachment of the two extreme fall wires to the cradle to accommodate a support strop (15) from a boat (14) to be support on

the cradle.

The cradle is suitably also provided with a weight or weights (9) and float means (12) connected to the cradle at a position vertically intermediate the points of attachment of the fall wires (4) to the cradle and the point of attachment of the weight or weights (9) to the cradle.



GB 2 106 858 A

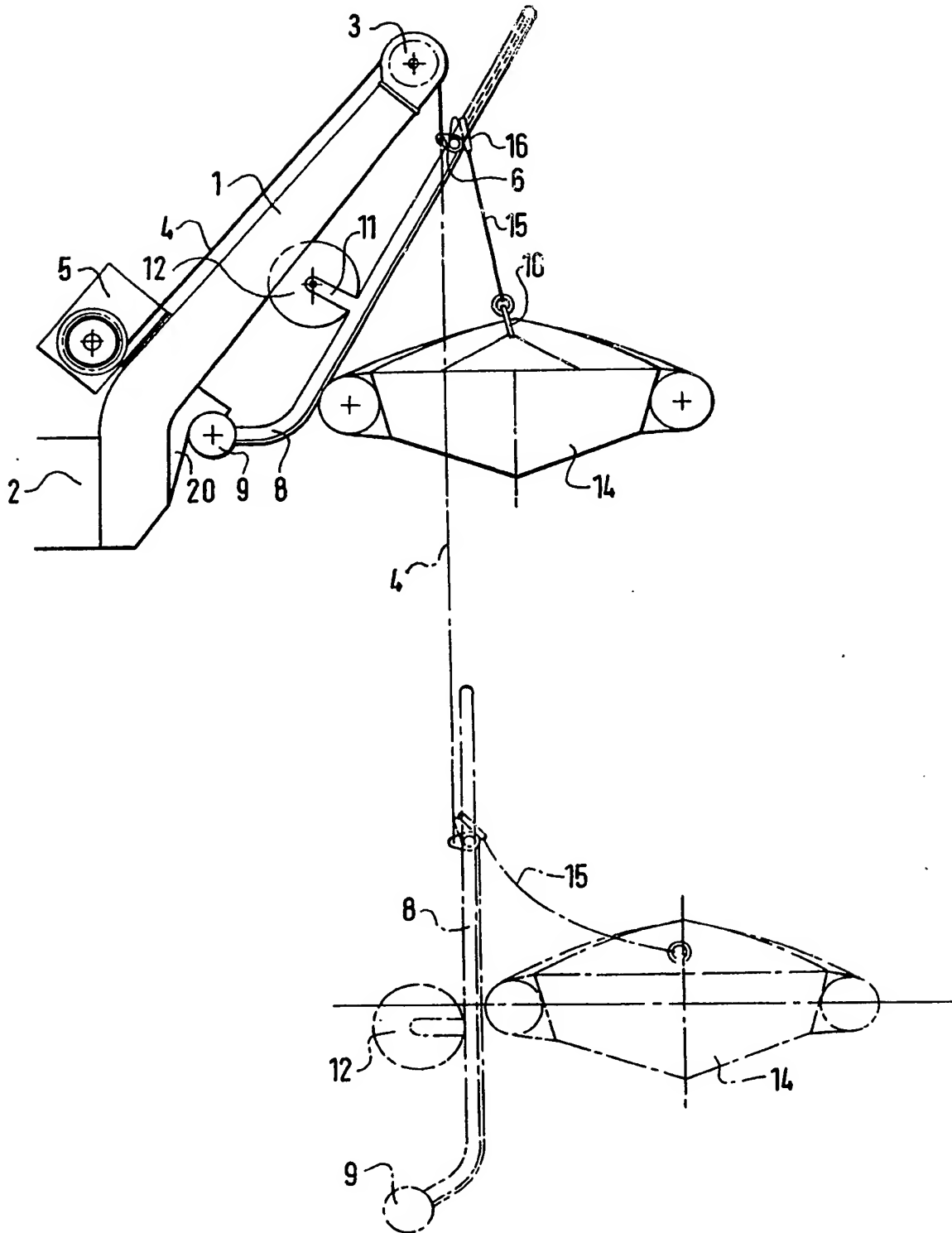
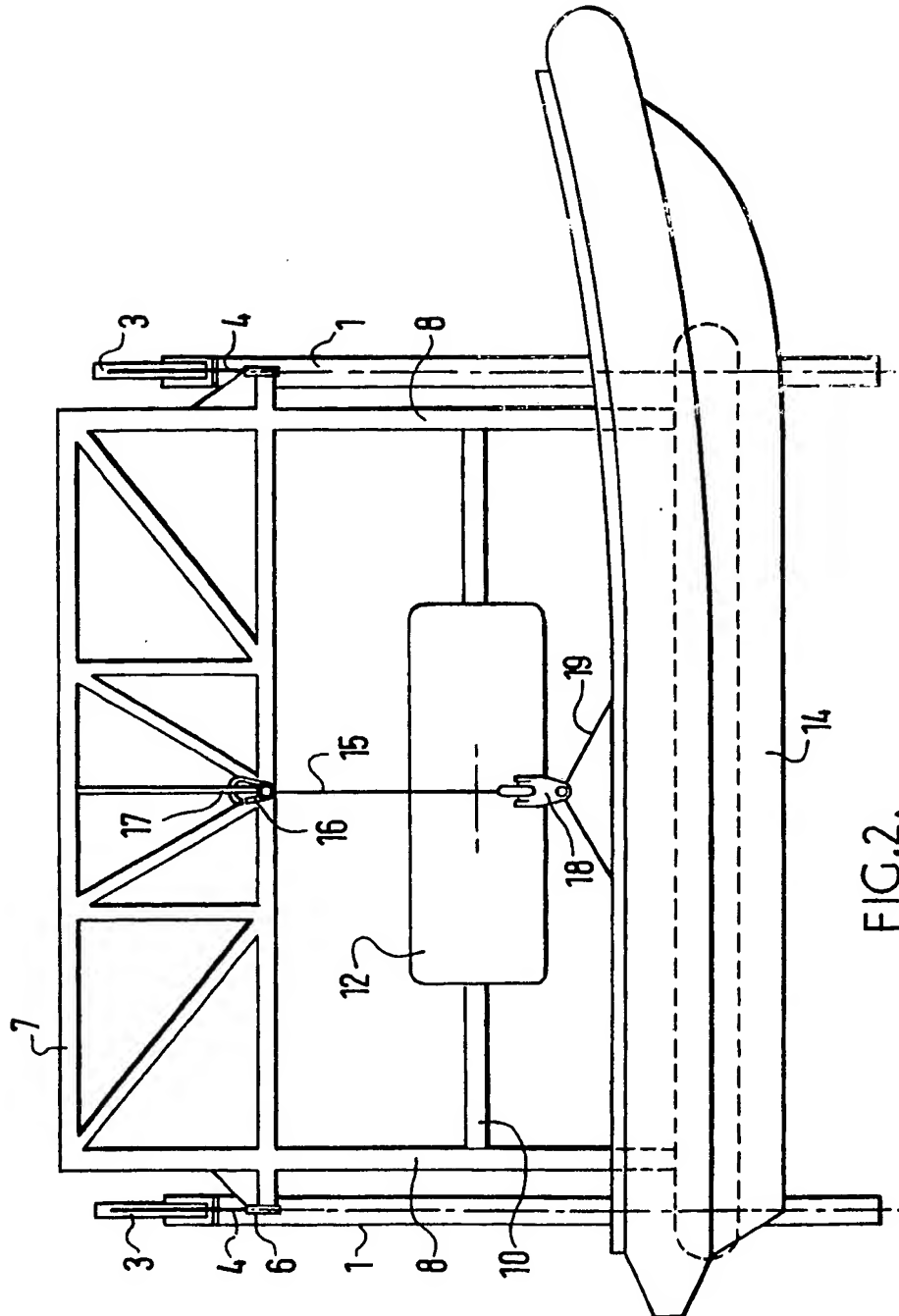


FIG. I.

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2/2



## SPECIFICATION

## Boat launching system

- 5 This invention is concerned with improvements in and relating to systems for launching work boats, lifeboats, rescue craft and like small vessels from a marine structure such as a ship, fixed platform or the like. For the sake of simplicity such launching systems will, hereinafter, be referred to as "davit" systems.

According to the invention there is provided a davit system comprising:

- 15 derrick means mounted on the marine structure and having two or more horizontally spaced sheaves to accommodate two or more respective fall wires;

- 20 a boat support cradle comprising a generally horizontal member and two or more spaced boat support members extending downwardly from the generally horizontal member;

- 25 two or more fall wires passing over the sheaves on the derrick means and connected to the upper part of the cradle; and  
a latching member mounted on the cradle at a point horizontally spaced intermediate the points of attachment of the two extreme fall wires to the cradle to accommodate a support  
30 strop from a boat to be supported on the cradle.

- Where the cradle is intended to be launched so that it is spaced apart from the side of the marine structure it is suitably also provided with a weight of weights connected to the lower part of the cradle and float means connected to the cradle at a position vertically intermediate the points of attachment of the fall wires to the cradle and the point of attachment of the weight or weights to the  
40 cradle.

- In general, for simplicity's sake, it is preferred that the davit system be provided with two fall wires and that the boat support cradle have two boat support members.

- In order that the invention may be well understood, reference will now be made to the accompanying drawings in which:

- Figure 1 is an end view of a davit system in accordance with the invention; and

- Figure 2 is a side view of the davit system shown in Fig. 1.

- As shown in Figs. 1 and 2 of the drawings, a davit system in accordance with the invention comprises a pair of derrick arms 1 fixedly mounted on a marine structure generally indicated at 2. Each of derrick arms 1 is provided with a sheave 3 over which passes a fall wire 4, the inboard end of which is connected to a winch 5 and the outboard end of which is connected to an eye 6 mounted on a boat support cradle generally comprising a horizontal support frame 7 and a pair of dependent boat support members 8.

- 65 A weight 9 is connected to the lower ends

of each of boat support members 8 and extends therebetween. A float support member 10 extends between projections 11 on boat support members 8 and accommodates a float 12. A rescue craft 14 is supported from the cradle by means of a single strop 15 provided with a latch 16 engaging with latch point 17 on horizontal support frame 7. The lower end of strop 15 is connected to rescue craft 14 by means of release hook or fixing ring 18 connected to the rescue craft by slings 19. As shown in the unbroken lines in Fig. 1, rescue craft 14 and the cradle are shown in the stowed position and, in the broken lines in Fig. 1, are shown in the launched position.

The derrick arms 1 each have profiled member 20 to accommodate weight 9 and to hold the whole cradle in a steady position when stored.

In operation, to lower a rescue craft 14 from the stowed position shown in Fig. 1 to the launched position shown in Fig. 1, winches 5 are actuated to lower the cradle, supporting the rescue craft 14, until the cradle and rescue craft are both floating in the water as shown in broken line in Fig. 1. In this position, due to the relative disposition of the centre of gravity of the cradle and the centre of buoyancy of the float 12, support arms 8 are in a generally upright position with respect to the water and the tension in strop 15 is relieved due to the relative floating positions of the cradle and the rescue craft. Thus, in order to release the rescue craft from the cradle all that is necessary is to release the release hook 18 in the rescue craft 14.

Recovery of the rescue craft is effected by bringing the rescue craft alongside the cradle and attaching a recovery sling, which may be the same or different to the strop 19, 15, the latching point(s) 17 on frame 7. The winches 5 are then actuated to raise the cradle with the attached rescue craft 14 to the position shown in full lines in Fig. 1. In the initial stages of this operation, as the cradle is retrieved, the gunwhale of the rescue craft 14 slides downwardly along the faces of support members 8, which may be provided with skid pads to facilitate this operation, until the recovery sling or strop is taut and the whole assembly is then lifted from the water and into the stored position.

The davit system in accordance with the invention has the advantage that slewing of the recovery vessel or rescue craft, and the cradle to which it is connected, can be largely controlled by the use of two fall wires. On the other hand release of the rescue craft from the cradle is effected by simple releasing one strop and, as is well recognised, this is an inherently safer boat release system.

As shown in the drawings, the derrick arms are each fixedly connected to the marine structure but, as will be appreciated, the derrick

arms or derrick assembly may be a pivoted or slewing arrangement.

#### CLAIMS

- 5 1. A davit system comprising:  
derrick means mounted on the marine  
structure and having two or more horizontally  
spaced sheaves to accommodate two or more  
respective fall wires;
- 10 a boat support cradle comprising a gener-  
ally horizontal member and two or more  
spaced boat support members extending  
downwardly from the generally horizontal  
member;
- 15 two or more fall wires passing over the  
sheaves on the derrick means and connected  
to the upper part of the cradle; and  
a latching member mounted on the cradle  
at a point horizontally spaced intermediate the
- 20 points of attachment of the two extreme fall  
wires to the cradle to accommodate a support  
strop from a boat to be supported on the  
cradle.
- 25 2. A davit system as claimed in claim 1 in  
which the cradle is provided with one or more  
weights connected to the lower part of the  
cradle and float means connected to the  
cradle at a position vertically intermediate at  
the points of attachment of the fall wires of
- 30 the cradle and the point of attachment of the  
weight or weights to the cradle.
3. A davit system as claimed in claim 1  
substantially as herein before described with  
reference to the accompanying drawings.

Printed for Her Majesty's Stationery Office  
by Burgess & Son (Abingdon) Ltd.—1983.  
Published at The Patent Office, 25 Southampton Buildings,  
London, WC2A 1AY, from which copies may be obtained.

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